

**Amendments to the Specification:**

Please replace paragraph 0037 of the specification with the following replacement paragraph:

Unfortunately due to the small dimensions of acceptable morphological features, desired surface morphology cannot be readily produced onto current implant materials. Instead, mechanical and chemical methods, such as shot peening and acid etching, are used to fabricate surface morphology onto the implant material after the shaping and fabrication of the actual implant body. Because of the statistical nature of these conventional techniques only surface morphologies with relatively crude and random features and lacking consistency and precision both in the shape and the distribution of desired surface features have been produced. Indeed, the production of suitable surface morphologies can be said to be the result of statistical accidents rather than by design.